CONCEPT: REVIEW OF CHEMICALS USED TO CONTROL MICROBIAL GROWTH

●Now let's review the different chemical agents that can be used for controlling microbial growth.

Chemical Methods to Control MIcrobial Growth			
	Control Method		**Description**
Liquid Chemicals	**Alcohols**		Organic compounds with at least one _____ (-OH) group.
	Aldehydes		Organic compounds with at least one _____ (-CHO) group.
	_____		Group of chemicals derived from the molecule *biguanide*.
	Chlorine (Halogen)		**Halogen** chemical used for disinfecting swimming pools & drinking water.
	_____ **(Halogen)**		**Halogen** chemical often used as an antiseptic in the form of a tincture.
	Soaps		Biodegradable, _____ surfactants with *fatty aids* containg a *salt* atom.
	Detergents		Nonbiodegradable, _____ surfactants with *sulfinate* groups.
	Quats		_____ detergents deemed safe enough to use in food preparation.
	Heavy _____		Metals with relatively high densities, atomic numbers, or atomic weights.
	_____		Chemical class derived from *phenol* originally used as a surgical sterilizer .
	Peroxygens		Strong _____ agents that sterilize but are toxic at high concentrations.
Gas Chemicals	**Ethylene** _____		Highly flammable gas sterilizer that requires a *long & controlled treatment.*
	Formaldehyde		A colorless & strong-smelling gas made by the oxidation of _____.
	Ozone		An unstable form of _____ that is a strong *oxidizing agent.*

PRACTICE: Which type of gas chemical agent requires a long treatment time in a controlled environment?

a) Ozone.

b) Formaldehyde.

c) Ethylene Oxide.

d) Chlorine.

CONCEPT: REVIEW OF CHEMICAL METHODS TO CONTROL MICROBIAL GROWTH

PRACTICE: Place the following surfactants in order from the most effective to the least effective antimicrobial activity: 1-Soap; 2-detergent; 3-Quats.

a) 1, 2, 3
b) 1, 3, 2
c) 2, 1, 3
d) 3, 2, 1
e) 3, 1, 2

PRACTICE: Which of the following substances is a non-biodegradable household surface-active agent?

a) Alcohol.
b) Soaps.
c) Detergent.
d) Bleach.

PRACTICE: _____ is the chemical used to disinfect swimming pools.

a) Chlorine.
b) Iodine.
c) Ethanol.
d) Phenol.